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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,914	02/02/2004	Randy E. Keen	KEENP001X1C1	1685

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EXAMINER

CHIN, CHRISTOPHER L

ART UNIT	PAPER NUMBER
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1641

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/770,914

Applicant(s)

KEEN, RANDY E.

Examiner

Christopher L. Chin

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/2/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,6 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 4,5 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 2, 3, 6, and 8-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent No. 6,060,327. Although the conflicting claims are not identical, they are not patentably distinct from each other because patent '327 claims a sensor for performing the instantly claimed method.

Patent '327 claims a sensor for sensing the presence of an analyte component, which sensor does not rely on redox mediators, the sensor comprising:

- a plurality of conductive polymer strands each having at least a first end and a second end and each aligned in a non-random orientation;

- a plurality of molecular recognition headgroups having an affinity for said analyte component and participating in a redox reaction when contacting a molecule of said

Art Unit: 1641

analyte component, said plurality of headgroups being attached to said conductive polymer strands such that when said redox reaction occurs at a headgroup, a mobile charge carrier is transferred directly to a conductive polymer strand attached to said headgroup, without redox reaction in the polymer strand; and

an electrode substrate attached to said conductive polymer strands at said second ends that reports to an electronic circuit reception of mobile charge carriers from said conductive polymer strands when the presence of said analyte component is sensed.

Patent '327 differs from the instant invention in not claiming a method for sensing the presence of an analyte component using the claimed sensor.

However, it would have been obvious to one of ordinary skill in the art that the sensor of patent '327 can be used to sense the presence of an analyte because the claimed sensor is specifically for detecting the presence of an analyte as set forth in the preamble. Furthermore, the instantly claimed method recites using the sensor of patent '327.

3. Claims 2, 3, and 9-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11, 18, and 19 of U.S. Patent No. 6,699,667. Although the conflicting claims are not identical, they are not patentably distinct from each other because patent '667 claims a method with essentially the same method steps as the instantly claimed method.

Art Unit: 1641

Patent '667 claims a method of detecting a concentration of an analyte component in an analyte with a sensor including (i) a substrate that reports reception of mobile charge carriers to an electronic circuit; and (ii) a plurality of active molecular recognition headgroup surfaces hard wired to a surface of the substrate by molecular wires aligned in a non-random orientation, the method comprising:

contacting said molecular recognition headgroup surfaces with said analyte to directly transfer mobile charge carriers to and through the molecular wires attached to said headgroup surfaces; and

determining whether mobile charge carriers have been transferred to said substrate from said molecular wire to thereby allow the substrate to sense the presence of the analyte component, wherein said mobile charge carriers are transported without redox reaction in the molecular wires.

The molecular wires comprise multi-stranded nucleic acid strands, such as double stranded DNA.

Patent '667 differs from the instant invention in claiming a method for detecting the concentration of an analyte component in an analyte while the instantly claimed method is for sensing the presence of an analyte component in an analyte.

However, it would have been obvious to one of ordinary skill in the art that detecting the concentration of an analyte component as in the '667 patent is the same as sensing the presence of analyte component as in the instant invention because the presence of the analyte component is sensed when its concentration is detected.

Allowable Subject Matter

4. Claims 4, 5, and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1641

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Chin whose telephone number is (571) 272-0815. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher L. Chin
Primary Examiner
Art Unit 1641

2/22/05